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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,179	11/20/2003	James C. Chen	TUC920030141US1	3227

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. EXAMINER
BATES, KEVIN T

ART UNIT	PAPER NUMBER
2155	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *20 November 2003*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-24* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-24* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date *11-20-03*.

4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

This Office Action is in response to a communication made on November 20,

2003.

The Information Disclosure Statement received November 20, 2003 has been

considered.

Claims 1 – 24 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Shanthaveeraiah (7200646) in view of Yao (2003/0084219) (Applicant's IDS).

Regarding claims 1 and 15, Shanthaveeraiah teaches a method for configuring

a path between nodes on a fibre channel fabric (Column 6, lines 23 – 26), comprising:

querying a name server for addresses of ports of a target node connected to a fabric

(Column 9, lines 49 – 61); receiving the address of a connected port (Column 9, lines 59

– 61); querying the name server for port names corresponding to the received

addresses (Column 9, lines 62 – 65); receiving the port name of the connected port

(Column 9, lines 65 – 67).

Shanthaveeraiah does not explicitly indicate generating an interface_id of the connected port, the interface_id corresponding to a slot number of the target node in which the port is located.

Yao teaches a system for creating paths in channel fabric that includes generating a interface_id including a slot number of the target node in which the port is located (Paragraph 35)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yao's teaching of an internal port address ID (or interface_id) in Shanthaveeraiah's system in order to better address line cards according to their shelfs and slots.

Regarding claim 7, Shanthaveeraiah teaches a storage area network, comprising:

a source node (Column 3, lines 50 – 53);

a target node having a node name (Column 3, lines 50 – 53);

a selected port in the target node having a port address and a port name (Column 7, lines 8 – 14);

a fabric to which the source node and the target node are coupled (Column 3, lines 50 – 53);

means for obtaining the address of the selected port (Column 9, lines 49 – 61);

means for obtaining the name of the selected port in response to the obtained port address (Column 9, lines 62 – 67).

Shanthaveeraiah does not explicitly indicate a data structure associated with the source node establishing a relationship between the port name of the selected port with a physical slot of the target node in which the selected port is located; or means associated with the source node for accessing the data structure and generating the interface_id of the selected port in response to the obtained port name.

Yao teaches a system for creating paths in channel fabric that includes a data structure associated with the source node and generating a interface_id including a slot number of the target node in which the port is located (Paragraph 35)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yao's teaching of an internal port address ID (or interface_id) in Shanthaveeraiah's system in order to better address line cards according to their shelfs and slots.

Regarding claim 21, Shanthaveeraiah teaches a method for establishing a path between nodes on a fibre channel fabric, comprising:

modifying a target node name to generate the name of each port in the target node (Column 7, lines 8 – 14);

querying a name server for addresses of ports of a target node connected to a fabric (Column 9, lines 49 – 61);

receiving the address of a connected port; querying the name server for port names corresponding to the received addresses (Column 9, lines 59 – 61);

receiving the port name of the connected port (Column 9, lines 62 – 65);

from a name of a target node, generating the name of the selected port (Column 6, lines 8 – 15);

querying the name server with the name of the selected port;

receiving the address of the selected port (Column 9, lines 59 – 61); and

opening a session with the selected port (Column 1, lines 51 – 57).

Shanthaveeraiah does not explicitly indicate generating an interface_id of the connected port, the interface_id corresponding to a slot number of the target node in which the port is located and using the interface_id and the world-wide name are used in a look-up table to determine the physical address of a port on a server (Paragraph 57).

Yao teaches a system for creating paths in channel fabric that includes generating a interface_id including a slot number of the target node in which the port is located (Paragraph 35) and that the target name is the world wide name (Paragraph 33).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yao's teaching of an internal port address ID (or interface_id) in Shanthaveeraiah's system in order to better address line cards according to their shelfs and slots.

Regarding claims 2, 8, and 16, Shanthaveeraiah teaches the method of claims 1, 7, and 15, further comprising: from a WWNN of a target node querying the name server with the name of the selected port; receiving the address of the selected port

(Column 9, lines 59 – 61); and opening a session with the selected port (Column 1, lines 51 – 57).

Shanthaveeraiah does not explicitly indicate that the port name is generated using the interface_id and target name.

Yao teaches using the interface_id and the world-wide name are used in a look-up table to determine the physical address of a port on a server (Paragraph 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yao's teaching of determing the physical address of the target in Shanthaveeraiah's system in order to allow devices to change address without having to rediscover all the devices on the network.

Regarding claims 3 and 17, Shanthaveeraiah teaches the method of claims 1.

Shanthaveeraiah does not explicitly indicate that modifying a target node name to generate the name of each port in the target node.

Yao teaches using the interface_id and the world-wide name are used in a look-up table to determine the physical address of a port on a server (Paragraph 57).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yao's teaching of determing the physical address of the target in Shanthaveeraiah's system in order to allow devices to change address without having to rediscover all the devices on the network.

Regarding claims 4, 18, and 22, Shanthaveeraiah teaches the method of claims 3, 17, and 21.

Shanthaveeraiah does not explicitly indicate that the target node name is a world

wide node name; and the port name of each port is a world wide port name.

Yao teaches a system for creating paths in channel fabric that includes using the

world wide names to map the ports and target addresses to their physical address.

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to use Yao's teaching of mapping the WWNN to the address of the

system in order to provide an index the physical address in case the physical address

has been changes.

Regarding claims 5, 19, and 23, Shanthaveeraiah teaches the method of claims

4, 18, and 22.

Shanthaveeraiah does not explicitly indicate that the instructions for modifying

the node name comprises instructions for replacing a byte of the world wide node name

with a byte indicative of the slot number.

Yao teaches that as part of the name and address of the target device the

system includes the slot number (Paragraph 35).

It would have been obvious to one of ordinary skill in the art at the time the

invention was made to include Yao's teaching of including the slot number in the

naming and addressing of the devices in order to allow the port that is to be accessed to

be found within the hardware of the target address.

Regarding claims 6, 20, and 24, Shanthaveeraiah teaches the method of claims

1, 15, and 21.

Shanthaveeraiah does not explicitly indicate that the address of each connected port is a destination_id.

Yao teaches that the port address is added into the physical addressing of the target node in the system (the destination address (Paragraph 36).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Yao's teaching of including port address in Shanthaveeraiah's system in order to allow direct ports to be addressed.

Regarding claim 9, Shanthaveeraiah teaches the storage area network of claim 8, further comprising a name server, comprising: means for receiving a query from the source node requesting addresses of ports in the target node (Column 9, lines 59 – 61); and means for transmitting the port addresses to the source node (Column 9, lines 65 – 67).

Regarding claim 10, Shanthaveeraiah teaches the storage area network of claim 9, wherein the name server further comprises: means for receiving a query from the source node requesting port names corresponding to the transmitted port addresses; and means for transmitting the port names to the source node (Column 9, lines 62 – 67).

Regarding claim 11, Shanthaveeraiah teaches the storage area network of claim 9, wherein the name server further comprises: means for receiving the name of the selected port and a query from the source node requesting the address of the port corresponding to the received port name; and means for transmitting the address of the selected port to the source node (Column 9, lines 49 – 61).

Regarding claim 12, Shanthaveeraiah teaches the storage area network of claim 8, wherein the means for obtaining the address of the selected port comprises: means for transmitting the name of the selected port and a query to a name server on the fabric requesting the address of the port corresponding to the transmitted name; and means for receiving the port address from the name server (Column 9, lines 49 – 67).

Regarding claim 13, Shanthaveeraiah teaches the storage area network of claim 7, wherein the means for obtaining the address of the selected port comprises: means for transmitting a query to a name server on the fabric requesting addresses of ports in the target node; and means for receiving the port addresses from the name server, the received port addresses including the address of the selected port (Column 9, lines 49 – 67).

Regarding claim 14, Shanthaveeraiah teaches the storage area network of claim 13, wherein the means for obtaining the name of the selected port comprises: means for transmitting a query to a name server on the fabric requesting names of ports corresponding to the received port addresses; and means for receiving the port names from the name server, the received port names including the name of the selected port (Column 9, lines 49 – 67).

Prior Art

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U. S. Patent No. 6792479 issued to Allen, because it discloses node and port

names.

U. S. Patent No. 6128161 issued to Reynolds, because it teaches using the node

name and port name to located network addresses.

U. S. Patent No. 5954796 issued to McCarty, because it teaches using

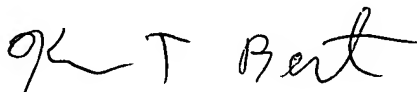information from the node name and port to determine other identifiers of the devices.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Kevin Bates whose telephone number is (571) 272-

3980. The examiner can normally be reached on 9 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone number for

the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin Bates
July 5, 2007